

**UNITED STATES OF AMERICA
BEFORE THE
DEPARTMENT OF ENERGY**

Interstate Electric Transmission System
Electric Reliability Issues
Notice of Inquiry

**COMMENTS OF THE NORTHEAST POWER
COORDINATING COUNCIL**

The Northeast Power Coordinating Council (NPCC) hereby submits its comments in response to the Department's Notice of Inquiry seeking comments on whether to initiate a rulemaking to enable the Federal Energy Regulatory Commission (FERC) to impose mandatory electric reliability standards. NPCC welcomes this opportunity to comment on the Department's proposal and to comment more generally on how electric reliability may be maintained, given the transition to a restructured and more competitive electricity market.

I.

NPCC is one of the ten regional reliability organizations that make up the membership of the North American Electric Reliability Council (NERC). NPCC is the third largest regional reliability council with responsibility for coordinating the reliability of the bulk power system in the Northeastern United States and Eastern Canada. With a total non-coincident load for Summer 2000 of over 97,200 MW, NPCC effectively coordinates the operations of five contiguous control areas: New York, New England, Ontario, Quebec and the Maritimes. Together, the load in New York and New England represents over 8% of the total load in the United States and the provincial load within NPCC represents approximately 70% of the total

Canadian load. The geographic area covered by NPCC includes New York, the six New England states, Ontario, Quebec, and the Maritime Provinces. Electric service to the major metropolitan load centers of New York City, Boston, Toronto and Montreal is provided via a highly interconnected bulk power system totaling over 35,000 miles, with interconnections to the Mid-Atlantic Area Council (MAAC), East Central Area Reliability Coordination Agreement (ECAR) and Mid-Continent Area Power Pool (MAPP) NERC Regions.

NPCC, as a reliability council, coordinates reliability in its region through the establishment of reliability criteria, coordination of system planning and operations, and monitoring and assessment of compliance with such reliability criteria. In the development of reliability criteria, NPCC, to the extent possible, facilitates attainment of fair, effective and efficient competitive electric markets.

NPCC is an international, voluntary, non-profit organization. NPCC's *Membership Agreement* provides for open, inclusive membership and fair and non-discriminatory governance. Full membership is available to all entities that participate in the interconnected electricity market in Northeastern North America, and is diverse. NPCC's full members include electric utilities, transmission owners and providers, non-utility generators, power marketers, transmission customers, Independent System Operators (ISOs), the New York State Reliability Council, and the Ontario Independent Electricity Market Operator (IMO). Two voting classes exist, each consisting of several sectors. Full Members are classified as either Transmission Providers or Transmission Customers and have one vote within their voting class.

The *Membership Agreement* also allows for non-voting membership to be extended to regulatory agencies with jurisdiction over participants in the electricity market in Northeastern North America, as well as to public interest organizations expressing interest in the reliability of electric service in Northeastern North America.

II.

Since the Northeast Blackout in 1965, the electric utility industry has relied on an industry-based, voluntary structure to maintain the reliability of the interconnected bulk power system.¹ The industry has established the fundamental requirements necessary for reliable, international interconnected system operation. These requirements include, but are not limited to security criteria, which exist to this day, for balancing control area interchange, providing for N-1 anti-cascading contingency coverage,² restoring system control following a disturbance, and coordinating system protection, including underfrequency load shedding. The primary intent of these criteria is to contain reasonably expected events to the area experiencing the problem, while also limiting the exposure of the interconnected bulk power system to more extreme, low probability events. These criteria support the fundamental reliability precept that actions, up to and including the disconnection of firm customer load, must be taken to prevent the uncontrolled cascading failure of the interconnected bulk power system.

The regional reliability councils are the foundation of the industry's reliability assurance structure, with NERC providing overall coordination. NERC, through an open process, establishes broad-based, industry-wide standards. NPCC's criteria implement these standards on a regional basis and, to the extent possible, facilitate attainment of fair, effective and efficient competitive electric markets.

NPCC developed a reliability assessment program in 1977 to bring together the reliability initiatives within NPCC. This program has assured a high degree of reliability through the Members' voluntary adherence to reliability criteria and coordination of system design and operations.

¹ In fact, NPCC was formed to promote reliability shortly after the 1965 blackout.

² N-1 is a design principle requiring that the loss of any single power system element will not result in an adverse area impact also referred to as "first contingency coverage."

More recently, NPCC's members approved unanimously a Reliability Compliance and Enforcement Program (RCEP). This program authorizes NPCC to enforce compliance with a specific set of criteria that are fundamental to maintaining reliability in Northeastern North America. The RCEP applies to each full Member of the Council by virtue of their membership in NPCC and requires each Member to submit data and reports; provides a mechanism for assessing the Members' compliance with reliability; and establishes tiered sanctions for non-compliance. Industry-wide consensus legislative language has also been developed to provide for a self-regulating, industry-based reliability organization, the North American Electric Reliability Organization (NAERO), that would develop broad-based, industry-wide standards that are implemented and enforced on a regional basis by affiliated regional reliability entities, such as NPCC, the regional reliability organization for Northeastern North America.

Moving forward in response to the changing utility industry and building on regional efforts such as NPCC's RCEP, NERC is in the process of developing a mechanism that will obligate each regional reliability council to have in place a sanctions-based reliability compliance and enforcement program that apply to all members of the regional reliability council. Once in place, this mechanism will provide an industry-based structure of mandatory compliance with, and enforcement of, each region's reliability criteria. NERC will provide oversight and coordination to ensure that the reliability criteria are consistent across the regions and will assess whether the programs are working to maintain reliability. These industry-based efforts, which make the proposed rulemaking unnecessary, should be encouraged by the Department.

In addition, the Department's proposal is not workable on an industry-wide basis. As noted above, the interconnected bulk power system is international in scope. The systems in New York and New England are highly interconnected with the bulk power systems in eastern Canada. The reliability of these systems are interdependent. Bulk power systems in the western

United States are similarly interconnected with bulk power systems in Canada and Mexico. Accordingly, to ensure reliability of the interconnected grid, reliability standards must be applicable to the utility industry not only of the United States but also Canada and Mexico. However, reliability standards imposed by FERC would only be applicable to jurisdictional utilities in the United States and therefore could fracture the reliability structure of the North American interconnected bulk power system.

In summary, NPCC respectfully suggests that the Department should not send its proposed rulemaking to FERC at this time. The industry-based reliability structure is continuing to evolve in response to the changing utility industry to assure reliability in a competitive environment. This industry-based reliability structure, moreover recognizes and maintains the reliability of the entire international, interconnected bulk power system in North America.

III.

In response to the Department's specific questions, NPCC submits the following:

Question 1. *Is the existing arrangement of voluntary compliance with industry reliability rules sufficient to ensure reliability of the bulk power transmission system? If no, why not, and has reliability been jeopardized by violation of the existing bulk power reliability standards?*

The industry is already moving beyond a system of voluntary compliance with reliability standards. In NPCC's case, all Members are obligated to comply with regional reliability criteria and applicable NERC reliability standards. Moreover, as noted above, NPCC's *Membership Agreement* was amended recently to establish a mechanism for enforcing compliance with selected reliability criteria. In addition, the regional reliability councils and NERC are developing mechanisms that will obligate all regional reliability councils to have in place sanctions-based reliability compliance and enforcement programs.

Question 2. *What can FERC do under existing authorities to address reliability concerns?*

The FERC has indicated that it does not have authority to establish reliability standards. For example, in testimony before the Senate Energy and Natural Resources Committee on March 20, 1997, the then-Chairman of the FERC stated, "There is no clear Federal authority for establishing reliability standards for the electric utility industry." More recently, the FERC's current Chairman stated in testimony before the House Energy and Power Subcommittee on October 5, 1999 that:

Today, industry participants increasingly recognize that cooperative efforts among transmission-owning utilities may not be sufficient in a competitive environment, and that a mandatory system for ensuring the reliability of the grid is needed. This recognition has caused the industry to begin seeking the Commission's involvement on reliability issues, even though the Commission has not regulated system reliability historically and it has no express authority to do so. For example, while the Commission has authority to address discrimination in jurisdictional transmission services, it has no explicit statutory role in setting or reviewing particular reliability standards or in ensuring the security of the electrical system or the adequacy of supply. That was left largely to the industry and the States.

Nevertheless, in Western Systems Coordinating Council, 87 FERC ¶ 61,060 (1999), the FERC accepted a reliability system that requires participants to adhere to reliability criteria and contains sanctions for failure to comply with those criteria. The Western Systems case involved a regional council's reliability management system under which the regional council entered into contracts with transmission providers and generators obligating them to adhere to selected reliability standards. The FERC agreed to play a backstop role when disputes could not be resolved through alternative dispute resolution procedures. This type of backstop role fits naturally with the reliability compliance and enforcement programs the regional reliability councils and NERC are developing. The FERC should be encouraged to play this role pending the enactment of reliability legislation.

In addition, FERC has the authority and responsibility under the Federal Power Act sections 205 and 206, 16 U.S.C. 824d and 824e, to ensure that the rates, charges, classifications, and service of public utilities (and any rule, regulation, practice, or contract affecting any of these) are just and reasonable and not unduly discriminatory, and to remedy undue discrimination in the provision of such services.

Question 3. *If FERC has the authority to establish and enforce reliability standards, may FERC delegate such authority to a self-regulating reliability organization? Should it do so?*

If FERC is given authority to establish reliability standards, there are two reasons FERC should delegate this authority to an industry-based, self-regulating reliability organization for implementation and enforcement on a regional basis by affiliated regional reliability entities, such as NPCC, the regional reliability organization for Northeastern North America. First, as NPCC noted above, a FERC-mandated reliability standard would be applicable only to jurisdictional utilities in the United States, even though reliability is internationally interdependent. Industry-based, regional reliability organizations can and have developed reliability criteria that are applicable across international boundaries. Second, broad-based, industry-wide reliability standards may have different implementations across North America due to specific regional requirements. Specialized expertise is required to assess the reliability needs of each region and develop reliability criteria that fit those needs. The industry has this expertise and has in fact used it to develop reliability criteria that are consistent with and represent the regionally specific implementation of the industry-wide, broad based NERC standards. Industry-based, regional reliability organizations can best harness this expertise to ensure that the reliability needs of each region are met and enforced.

Question 4. *Are there elements in Comprehensive Electricity Competition Act (CECA), or other electric reliability legislative language, which can, with or without modification, be used in a rulemaking?*

NERC and the regional reliability councils are developing reliability compliance and enforcement programs in which the regional reliability councils will establish a sanctions-based means of enforcing compliance with reliability standards and NERC will provide oversight, coordination and assessment of the effectiveness of the programs. They are doing so to meet the essential reliability assurance elements contemplated in the reliability legislation. The effectiveness of the programs being developed can be strengthened by FERC taking on the backstop role.

Question 5. *What should the relationship be between Regional Transmission Organizations, as advanced in FERC Order no. 2000, 65 FR 809 (January 6, 2000), FERC Stats. & Regs., and an Electric Reliability Organization as proposed in CECA?*

The relationship between a Regional Transmission Organization (RTO) and a self-regulating reliability organization and affiliated regional reliability entities, such as NPCC, the regional reliability organization for Northeastern North America should be much as the FERC outlined in Order No. 2000, 65 Fed. Reg. at 875. That is, the self-regulating reliability organization should establish, through open and inclusive procedures, broad-based, industry-wide standards that are implemented by regional reliability organizations to support the specific reliability requirements of the region in which the RTO is located. The RTO should then operate, consistent with its tariff, in accordance with these criteria. The regional reliability organizations should then assess whether the criteria are being followed and enforce compliance if necessary.

In addition, a regional reliability organization can provide support for many of the FERC-prescribed RTO characteristics and functions. For example, assuming the New York

Independent System Operator and ISO-New England file to form respective RTOs, their membership and participation in NPCC helps to satisfy three of the four FERC RTO characteristics and four of the RTO functions. The characteristics supported by participation in NPCC are: scope and regional configuration (RTO characteristic No. 2); Operational Authority (Characteristic No. 3); and, Short-Term Reliability (Characteristic No. 4).

Regional reliability organizations can also support RTO functions, such as inter-regional coordination (RTO Function No. 8), planning and expansion (RTO Function No. 7), and congestion management and parallel path flow (RTO Function Nos. 2 and 3). Through NPCC, New York and New England participate in various reliability related activities that involve Canadian and other U.S. control areas, neighboring regions and NERC. In addition, NPCC has historically played a major role in coordinating large bulk power system additions within northeastern North America. This includes involvement in relieving bulk power system congestion and addressing parallel path flows. Regional reliability organizations should continue to provide this support.

Question 6. *How should the responsibilities and roles of FERC and the States be addressed in a rulemaking?*

The authority of a State to take action to ensure the safety, adequacy and reliability of electric service within that State must be retained and not be preempted. The responsibilities and associated authorities of the States, focus on the adequacy and siting of facilities necessary to ensure reliability and the local utilization of facilities. The consensus legislative language which provides for a self-regulating, industry-based reliability organization, accommodates more stringent regional and sub-regional implementation of broad-based industry-wide standards through affiliated regional reliability organizations.

Question 7. *Recognizing the international nature of the interconnected transmission grid, how could implementation of mandatory reliability standards be coordinated with Canada and Mexico?*

As NPCC has explained, it is critically important to recognize that reliability has an international scope. In NPCC's case, the strong interconnections between the Northeastern United States and Eastern Canada make it impossible to separate the reliability of the Canadian portion of the interconnected bulk power system from the reliability of the United States portion. Any proposal to establish a comprehensive reliability structure must ensure that this international reliability interdependency is not ignored. Reliability standards imposed by regulatory authority in the United States will not be applicable to the utility industry in Canada and Mexico and will therefore inevitably weaken reliability in North America, not strengthen it. In NPCC's view, therefore, the only way to ensure reliability is through the use of industry-based reliability standards that are applicable not only in the United States but also in Canada and Mexico. Enforcement of these standards must take place through industry-based organizations with applicable regulatory authorities acting in a backstop role.

Respectfully submitted,

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